Validated By CRFValidator v 1.0.3

Application No: 10506925   Version No: 3.0

Input Set:

Output Set:

            Started: 2008-05-19 14:11:08.608
           Finished: 2008-05-19 14:11:13.865
            Elapsed: 0 hr(s) 0 min(s) 5 sec(s) 257 ms
     Total Warnings: 17
       Total Errors: 0
No. of SeqIDs Defined: 17
  Actual SeqID Count: 17

Error code   Error Description

W   213   Artificial or Unknown found in <213> in SEQ ID (1)

W   213   Artificial or Unknown found in <213> in SEQ ID (2)

W   213   Artificial or Unknown found in <213> in SEQ ID (3)

W   213   Artificial or Unknown found in <213> in SEQ ID (4)

W   213   Artificial or Unknown found in <213> in SEQ ID (5)

W   213   Artificial or Unknown found in <213> in SEQ ID (6)

W   213   Artificial or Unknown found in <213> in SEQ ID (7)

W   213   Artificial or Unknown found in <213> in SEQ ID (8)

W   213   Artificial or Unknown found in <213> in SEQ ID (9)

W   213   Artificial or Unknown found in <213> in SEQ ID (10)

W   213   Artificial or Unknown found in <213> in SEQ ID (11)

W   213   Artificial or Unknown found in <213> in SEQ ID (12)

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W   213   Artificial or Unknown found in <213> in SEQ ID (14)

W   213   Artificial or Unknown found in <213> in SEQ ID (15)

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<110>   Neurogenex Co., Ltd.

<120>   ENHANCED INSERTED YELLOW FLUORESCENCE PROTEIN AND ITS

<130>   100528.0007US1

<140>   10506925
<141>   2004-09-07

<150>   KR10-2002-0012409
<151>   2002-03-08

<150>   KR10-2002-0015217
<151>   2002-03-21

<150>   KR10-2002-0015219
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<160>   17

<170>   PatentIn version 3.4

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<212>   PRT
<213>   Artificial Sequence

<220>
<223>   y-citrine of fluorescence protein

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Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
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Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
            20   25   30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
        35   40   45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
    50   55   60

Phe Gly Tyr Gly Leu Met Cys Phe Ala Arg Tyr Pro Asp His Met Lys
65   70   75   80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
                85   90   95

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Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
            100                 105                 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
            115                 120                 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
        130                 135                 140

Asn Tyr Gly Gly Ser Gly Ala Ser Asn Ser His Asn Val Tyr Ile Met
145                 150                 155                 160

Ala Asp Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His
            165                 170                 175

Asn Ile Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn
            180                 185                 190

Thr Pro Ile Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu
            195                 200                 205

Ser Tyr Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His
        210                 215                 220

Met Val Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr Leu Gly Met
225                 230                 235                 240

Asp Glu Leu Tyr Lys
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<210>  2
<211>  245
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Peridot of fluorescence protein

<400>  2

Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
1               5                   10                  15


Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
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Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
        35   40   45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
        50   55   60

Phe Gly Tyr Gly Leu Met Cys Phe Ala Arg Tyr Pro Asp His Met Lys
65   70   75   80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
                85   90   95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
                100   105   110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
        115   120   125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
        130   135   140

Asn Tyr Gly Gly Ser Gly Ala Ser Asn Ser His Asn Val Tyr Ile Met
145   150   155   160

Ala Asp Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His
                165   170   175

Asn Ile Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn
                180   185   190

Thr Pro Ile Gly Asp Gly Leu Val Leu Leu Pro Asp Asn His Tyr Leu
                195   200   205

Ser Tyr Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His
        210   215   220

Met Val Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr Ile Gly Met
225   230   235   240

Asp Glu Leu Tyr Lys
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<223> BamHI/CaM F primer

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<223> BamHI,Nhe1/Yins-R primer

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ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc   180

ctcgtgacta ccttcggcta cggcctgatg tgcttcgccc gctaccccga ccacatgaag   240

cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg caccatcttc   300

ttcaaggacg acggcaacta caagacccgc gccgaggtga agttcgaggg cgacaccctg   360

gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac   420

aagctggagt acaactacgg tggatccatg catgaccaac tgacagaaga gcagatcgca   480

gaatttaaag aggctttctc cctatttgac aaggacgggg atgggacaat aacaaccaag   540

gagctgggga cggtgatgcg gtctctgggg cagaacccca cagaagcaga gctgcaggac   600

atgatcaatg aagtagatgc cgacggtaat ggcacaatcg acttccctga gttcctgaca   660

atgatggcaa gaaaaatgaa agacacagac agtgaagaag aaattagaga agcgttccgt   720

gtgtttgata aggatggcaa tggctacatc agtgcagcag agcttcgcca cgtgatgaca   780

aaccttggag agaagttaac agatgaagag gttgatgaaa tgatcaggga agcagacatc   840

gatgggggatg gtcaggtaaa ctacgaagag tttgtacaaa tgatgacagc aaaggctagc   900

aacagccaca cgtctatat catggccgac aagcagaaga acggcatcaa ggtgaacttc   960

aagatccgcc acaacatcga ggacggcagc gtgcagctcg ccgaccacta ccagcagaac   1020

acccccatcg gcgacggcct cgtgctgctg cccgacaacc actacctgag ctaccagtcc   1080

gccctgagca agacccccaa cgagaagcgc gatcacatgg tcctgctgga gttcgtgacc   1140

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<210> 14
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> BamHI/DEVD F primer

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<210> 15
<211> 49
<212> DNA
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<223> NheI/DEVD R primer

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<212> DNA
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ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc   180

ctcgtgacta ccttcggcta cggcctgatg tgcttcgccc gctaccccga ccacatgaag   240

cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg caccatcttc   300

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gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac   420

aagctggagt acaactacgg tggatccgcc atcaagaatg aaggaaagag aaaaggcgac   480

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ctgcccgaca accactacct gagctaccag tccgccctga gcaaagaccc caacgagaag   720

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<223> Synthetic sequence

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1